Los Angeles County
Department of Regional Planning

Planning for the Challenges Ahead

December 6, 2010

Richard J. Bruckner
Director

TO: Supervisor Michael D. Antonovich, Mayor
Supervisor Gloria Molina
Supervisor Mark Ridley-Thomas
Supervisor Zev Yaroslavsky
Supervisor Don Knabe

FROM: Richard J. Bruckner
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Gail Farber
Director of Public Works

SUBJECT: **RESPONSE TO BOARD MOTION OF SEPTEMBER 7, 2010, AGENDA ITEM #33-D REGARDING TWO CASES IN THE LA CRESCENTA-MONTROSE CSD AND IMPROVED PRACTICES FOR DETERMINING GRADE AND BUILDING HEIGHT**

This memorandum is a collaborative response from both the Department of Regional Planning (DRP) and the Department of Public Works (DPW) to the September 7, 2010 motion made by Supervisor Michael Antonovich instructing the Director of Regional Planning and Director of Public Works to:

- Investigate the cases at 2435 Florencita Avenue in Montrose and 2626-2636 Foothill Boulevard in La Crescenta and identify what went wrong in terms of the staff review of grade and height relative to the proposed development projects;
- Identify remedies that can be implemented to prevent such errors from occurring on future development and
- Report back to the Board of Supervisors in 90 days with their findings.

For purposes of zoning conformance DRP measures height from the natural grade at the perimeter of the structure unless excavation occurs, in which case height is measured from the new excavated grade level around the perimeter of the structure. In both of the above cases the height limit was 35 feet above grade and the plans approved by DRP showed the height to be in compliance with the 35 foot height limit. DRP and DPW rely upon the accuracy of the information provided by architects and engineers who design a project in order to evaluate the project. This memorandum describes what happened in each of the cases in question, provides a detailed explanation of how DRP calculates height and provides a new protocol for evaluating projects to more effectively verify the information submitted by applicants.

Florencita Avenue Property

The first case discussed in the Board motion is located at 2435 Florencita Avenue. A new 15-unit apartment building was approved by DRP under Plot Plan 47829 on September 2, 2002. The elevation plans for the building that DRP ultimately reviewed and approved depicted the maximum height of the building to be 35 feet.

After the structure was built, complaints from the community regarding the height of the structure were voiced and reported to DRP. In response to the complaints, a field inspection was made by zoning enforcement staff who confirmed that the maximum building height exceeded the 35 foot limit. The applicant was asked by DRP to remove the area of the structure that exceeded the 35 foot height limit. The applicant filed an amendment to Plot Plan 47829 showing compliance with the height limit and removal of nearly eight feet of the southeast part of the structure. The amendment showed a height of slightly over 32 feet after the removal of the top part of the structure for the section of the building that exceeded the height limit. The highest part of the structure was 35 feet above finished grade on the amended plans. This amendment was approved by DRP on November 15, 2005.

In this instance, the plans at DRP were reviewed correctly according to Los Angeles County Zoning Code (Title 22) provisions. However, the submitted plans did not correctly depict the actual finished grade, which was two feet lower than what was shown on the approved plans for the southeast part of the structure. The natural grade was shown correctly on the plans, but the land was graded two feet lower at the southeast corner of the structure than had been shown on the approved plans. The builders also built the structure three feet higher than what was shown on the plans for the southeast portion of the structure. These two errors by the builders resulted in the building being constructed approximately 40 feet above the finished grade.

Foothill Boulevard Property

The second case involves a new commercial office building located at 2626-2636 Foothill Boulevard. The applicant submitted plans showing the height of the structure to be 35 feet above the existing grade and in compliance with Title 22 provisions. The existing grade at the perimeter of the structure was shown as descending approximately one foot from the front of the structure to the rear of the structure, and then descending much more steeply behind the structure. The plot plan (RPP 200900196) was approved on April 29, 2009 by DRP.

An amendment to the La Crescenta-Montrose CSD affecting the Foothill Boulevard area went into effect on October 1, 2009. The CSD amendment included a number of new design standards and procedural requirements for projects located within the Foothill Boulevard area. Some of these requirements would have affected the project, although they would not have changed the overall maximum height of the structure, which remains 35 feet based on the C-2 Zone requirements of Title 22. The CSD states that projects where building permits were submitted prior to the effective date are exempted from the new requirements. In this case building

permits were submitted to DPW on July 7, 2009. Therefore, the project was deemed to be exempt from the new CSD requirements.

Several inquiries were made to DRP by the community regarding the applicability of the new CSD requirements and also the removal of a ficus tree related to the project during July, 2010. A member of the public reviewed the approved plans at DRP during July, 2010. He indicated that the grade shown on the plans was not consistent with the actual site conditions.

Based on the complaints received, a site visit was conducted by DRP and DPW staff at the 2626-2636 Foothill Boulevard site. Grading was being done on the site at the time of inspection, making a determination of the original grade location more difficult. However, there were some areas near the perimeter of the property where grass was still visible that presumably was located on the original grade. DRP staff also prepared a contour map at this time using the GIS-Net computer mapping program used by DRP, which shows a change in elevation of approximately seven feet from the front of the structure to the rear, so the natural slope is much steeper on the front part of the property than what was depicted on the plans. Based on the site visit and the contour map, it was determined that the grade shown on the applicant's elevation plans was not an accurate depiction of the natural or finished grade conditions of the site.

A stop work order was issued by DPW on August 12, 2010, and the applicant was asked to correct the plans. The applicant has since revised the plans and submitted an amendment to depict the entirety of the structure to be within the 35 foot height limit. This amendment was approved by DRP on October 14, 2010. The stop work order has been lifted by DPW.

Explanation of How DRP Calculates Height

In the Zoning Code (Title 22), "Height of building or structure" means the plumb line distance from the point being measured to the grade (Section 22.08.080). In addition, "grade" means the approved grade of a lot or parcel of land at the time such lot or parcel is created, except when excavation is proposed. When excavation occurs after the lot or parcel is created, the grade of the excavated area shall be the grade after the excavation. Where fill material has been placed on a lot or parcel after such lot or parcel is created, grade shall be determined by the director. Grade within the perimeter of a structure shall be considered to transition uniformly from the lowest to the highest points of grade at the perimeter of the structure (Section 22.08.070).

When measuring the height of the structure, it is necessary to identify the grade on each side of the structure at the location being evaluated (finished grade where there is a cut or no grading, or natural grade if there is a fill at the location). The planner evaluating the height then draws a line on each side of the structure up to the height limit and connects the two points representing the height limit on each side of the structure. The planner also verifies that no part of the structure exceeds the height limit represented by this line. This procedure is followed for each building elevation

and cross section. Where building plans are complex, multiple cross sections will be required where needed to verify that no point of the structure will exceed the height limit.

Calculating the height of a structure above grade on sloping terrain is often difficult, particularly where there is grading involved or the structure is complex in design and close to the height limit. The current method of determining height requires the submission of accurate information by the project applicant for hillside projects. Depicting grade accurately requires an understanding of the definition of grade in Title 22 to insure both grade and height are represented correctly. As part of the Zoning Ordinance Update Project presently underway, DRP staff will consider modifying the definition of grade in Title 22 to make it simpler to understand and apply. Any change in the definition of grade in Title 22 would require approval by the Board of Supervisors. In the absence of any change in the definition of grade, DRP will continue to follow the existing definition. To strengthen existing review procedures, DRP is proposing to implement revised submission requirements and protocol for reviewing of building height for projects on sloping terrain.

Revised Submission Requirements and Protocol for Reviewing of Building Height

In each of the cases cited above the problems arose out of inaccurate information being presented by the applicant. DRP staff had not verified site conditions and accepted the information provided by the applicants. To insure the accurate depiction by applicants of both grade and building height on plans, DRP will take the additional steps identified in Attachment I and summarized below to verify grade and height information and to reduce the potential for error in the future.

Under the revised protocol, DRP will prepare a GIS-Net contour map for all projects involving new structures or additions to structures, regardless of location. The GIS-Net map would show contour information at intervals of every two feet. Based on this information, DRP staff can determine the topography of the site and compare it to the applicant's plans, elevations, building cross sections and site photographs to evaluate any potential grade or height issues. For projects on sloping terrain where the proposed height is within five feet of the height limit, DRP staff will require the applicant to submit a topographic survey contour map prepared by a licensed surveyor or engineer, along with detailed cross sections and elevation plans. DRP will verify that the site plan, building elevations and cross sections are consistent with the topographic survey, GIS-Net map, photographs and the other required information. For details on the revised protocol refer to the attachment. In instances when the grade or building height information provided by the applicant cannot be otherwise verified a site visit will be made.

The La Crescenta-Montrose CSD contains a requirement that development plans in the Foothill Boulevard Area must be prepared by an architect, general contractor or applicable contractor licensed by the State of California, and that they include a statement on the plans to certify compliance with all applicable CSD and other Title 22 requirements. The architect or contractor is also required to provide inspections at different stages of construction and to submit a statement to DRP after each

inspection to certify that the construction complies with the approved plans, the CSD requirements and all other applicable Title 22 requirements. These requirements apply only to the Foothill Boulevard Area and cannot be applied retroactively to projects approved prior to October 1, 2009, the effective date of the new requirements. The present CSD provisions will reduce the potential for buildings being constructed in the area that are not consistent with approved plans, that exceed the height limit or are otherwise not consistent with Title 22 requirements.

The protocol listed in Attachment I will make the review process more effective in verifying the accuracy of the grade and building height information submitted by applicants. Both DRP and DPW staff rely heavily on the accuracy of the information provided by applicants, which in most cases are licensed architects or engineers. The new protocol and tools being implemented in DRP will aid us in confirming applicant submitted height and grade information and in determining natural and finished grade, building height and location of structures. The new certification and inspection requirements in the La Crescenta-Montrose CSD will also help to avoid future problems in the Foothill Boulevard Area. The steps outlined on the attached summary will improve the review process on a county wide basis and detect errors before plans are approved. These revised protocols are expected to significantly improve our ability to detect inaccurate information related to making building height and grade determinations.

If you or your staff have questions or need further information, please contact Nooshin Paidar at (213) 974-6470 or npaidar@planning.lacounty.gov, or Mitch Miller at (626) 458-6390 or mmiller@dpw.lacounty.gov.

RJB:GF:np

Attachment

c: Chief Executive Officer
County Counsel
Executive Officer, Board of Supervisors

Attachment I
REGIONAL PLANNING
GRADE/HEIGHT VERIFICATION PROCEDURES FOR SITE PLAN REVIEW

1. When reviewing a site plan for a new structure or addition, check the GIS Net topographic layer. Click on the 2', 10' and 50' contour intervals and make a printout of the topographic map covering the property and place it in the file.
2. Check the photographs and topographic information submitted by applicant to see if the information corresponds and if the site appears to be on sloping terrain. At least six color photos should be provided at time of case intake. Each photo must be numbered noting the location and direction the photo was taken from and then depicted on a photo key map.
3. If the building site where the structure is going to be located is on sloping terrain, and if the proposed building height is within five feet of the maximum height allowed, then staff will ask for a topographic survey map showing the natural and finished grade contours of the site if it has not been provided by the applicant. For purposes of this analysis, if the natural or finished grade on one side of the structure is four or more feet higher than on the other side, it shall be considered sloping terrain.
4. The planner reviewing the case may require a topographic survey and additional cross sections and other information even if the proposed height is more than five feet below the height limit if the initial plans submitted by the applicant are not sufficiently clear to verify the grade and the height for all parts of the structure.
5. Staff will compare the topographic map to the GIS map to see if there are any significant differences. The topographic map provided by the applicant must have a stamp from a licensed surveyor or licensed professional civil engineer for cases where the proposed height of the structure is within 5 feet of the height limit.
6. In reviewing grade and building height plans, the planner will check that the site plan, floor plan, and building elevation/sections to insure these plans are representative and consistent with site conditions and meet Zoning Code requirements. The building elevations and cross sections need to labeled, to scale and depict both the natural and finished grade including finished floor elevations. On the building elevation plans, the grade lines must show the grade where the side of the structure meets the adjacent grade.
7. The topographic survey map submitted by applicant will show the building footprint in relation to the topographic contours around and within the building pad site. The natural and finished grade at each corner or at other key points around the building perimeter wall must be depicted in applicant drawings. This is particularly important when the proposed structure is close to the height limit (within 5 feet of the height limit) and if the slope is steep.
8. If the plans show building height is within five feet of the maximum limit and the property is on a slope, require building cross sections showing the structure to scale in relation to the natural and finished grade, labeling and dimensioning each building elevation at various key points from grade to the highest points of

the structure to verify the maximum height. A roof plan showing the elevation at various points of the roof, especially the peak of the roof ridge, may be necessary for some cases.

9. The plans we review must be to scale and dimensioned and have building height dimensions for the structure shown on the elevations for each side of the building. Sometimes multiple measurements may be needed on the same side where the slope is steep or the shape of the structure is unusual.
10. Check the application form and plans to see if grading is proposed. If it is, then make sure the amount of cut and fill are filled out on the application form. Check to see if cut and fill amounts match what is proposed on the plans.
11. If grading is proposed, make sure the plans show where cut and fill is proposed on a site plan, as well as on the elevations and building cross sections.
12. When measuring the height of the structure, first identify the grade on each side of the structure at the location being evaluated (finished grade where there is a cut or no grading, or natural grade if there is a fill at the location). Draw a line on each side of the structure up to the height limit. Connect the two points representing the height limit on each side of the structure. Verify that no part of the structure exceeds the height limit. Follow this procedure for each building elevation and cross section. Where building plans are complex, multiple cross sections may be needed to verify that no point of the structure will exceed the height limit.
13. If the property is in a Community Standards District (CSD) with a tiered structure height setback, then make sure the structure is in compliance with the structure height setback requirements. These requirements usually vary somewhat for each CSD that has one, so be sure to review the methodology to be used each time a case is reviewed in a CSD, as well as checking all other applicable CSD requirements.
14. Request corrections or additional information from the applicant if needed until all questions and problems have been resolved.
15. Discuss any difficult or potentially controversial cases with the section head prior to taking any final action.

In the Zoning Code, "Height of building or structure" means the plumb line distance from the point being measured to the grade. "Grade" means the approved grade of a lot or parcel of land at the time such lot or parcel is created, except when excavation is proposed. When excavation occurs after the lot or parcel is created, the grade of the excavated area shall be the grade after the excavation. Where fill material has been placed on a lot or parcel after such lot or parcel is created, grade shall be determined by the director. Grade within the perimeter of a structure shall be considered to transition uniformly from the lowest to the highest points of grade at the perimeter of the structure.